CLAIMS

1. A spring micro-scale, comprising a load platform suspended, by at least three flexural springs, in a surrounding frame, and with bridge-connected strain gauges arranged for measuring strain on one side of said flexural springs, said flexural springs extending in succession along substantially the whole periphery of the load platform in a gap between the load platform and an inner edge of the frame, an attachment spot on the load platform for each respective flexural spring being arranged substantially directly opposite or past an attachment spot on the inner edge of the frame for a next flexural spring in the succession, and said load platform being thin relative to said surrounding frame.

2. The micro-scale of claim 1, wherein the strain gauges are all oriented in the same direction, to obtain insensitivity regarding positioning of an object on the load platform.

3. The micro-scale of claim 1, wherein the flexural springs are thinned down to provide high compliance for weighing of small objects.

4. The micro-scale of claim 1, sherein the load platform, the flexural springs and the frame are shaped as one single micro-machined or etched piece of solid matter.

5. The micro-scale of claim 4, wherein said piece of solid matter is a silicon piece.

6. The micro-scale of claim 4,
wherein said strain gauges are integral in the piece of solid matter.

7. The micro-scale of claim 1,
wherein the strain gauges are piezo-resistive resistors.

8. The micro-scale of claim 1,
wherein each flexural spring has a strain gauge placed on a crossing between the flexural spring and the frame or the load platform.

9. The micro-scale of claim 1,
wherein the load platform is substantially quadratic.

10. The micro-scale of claim 1,
wherein the flexural springs lie parallel to respective side edges of the load platform.

11. The micro-scale of claim 9 or 10,
wherein the flexural springs have lengths substantially equal to the lengths of the closest side edges of the load platform.

12. The micro-scale of claim 1,
wherein the frame rests on, and is attached to, a substrate extending in under the load platform to work as an end stop for a swing downward of the load platform, said substrate possibly being equipped with a central opening underneath the load platform, for inspection and cleaning.

13. The micro-scale of claim 12,
wherein said substrate is made of glass, and is attached to the frame by means of anodic bonding.

14. The micro-scale of claim 1, further composing a roof above the load platform, said roof being attached peripherally on the frame, with a central opening above the load platform for placing objects to be weighed, and with an additional function as an end stop for possible swings upward of the load platform.

15. The micro-scale of claim 14, wherein the roof is made of glass, and that it is attached to the frame by anodic bonding.

16. The micro-scale of claim 1, wherein the number of flexural springs is four.

17. The micro-scale of claim 1, ~~wwherein the mechanical structure constituted by load platform, flexural springs~~ and frame, exhibits a four-fold rotation symmetry about a point at the center of the load platform.

18. The micro-scale of claim 1, wherein the load platform and the inner edge of the frame have a substantially complementary shape.